

REMARKS

Upon entry of the Amendment, Claims 1-4 and 6-9 will be pending in the application.

Claim 1 is amended to incorporate the subject matter of Claim 5, now canceled. No new matter is added.

Entry of the Amendment along with reconsideration and review of the claims on the merits are respectfully requested.

I. Preliminary Matter

Applicants request grant of the Petition to Withdraw Finality that was filed on March 4, 2005. In particular, the Examiner set forth at least one new ground of rejection in the final Office Action mailed February 23, 2005, that was not necessitated by Applicant's amendments. Independent claim 1 was still in its original form, and thus, the current rejection of such claim under 35 U.S.C. § 103 (a) in view of Ujita et al. (US 5,506,611) and Hirst et al. (US 5,930,553) is not necessitated by amendment (*See* MPEP § 706.07(a)). As such, the current rejection under 35 U.S.C. § 103(a), is improperly made final (see rejection of claims 1, 2 and 8 on pg. 5 of the February 23, 2005 Office Action). Thus, the use of Ujita, as a newly cited reference, to reject recitations of the previously unamended independent claim 1, requires the current Office Action to be made non-final.

Accordingly, Applicants request the Examiner to withdraw finality of the current Office Action.

II. Rejection under 35 U.S.C. § 103(a) in view of U.S. Patent No. 5,610,635 to Murray et al. (“Murray”) and U.S. Patent No. 5,930,553 to Hirst et al. (“Hirst”)

The Examiner has rejected claims 1-5 and 9 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Murray in view of Hirst.

A. Claim 1

Claim 1 is not rendered obvious over Murray in view of Hirst. As previously discussed, claim 1 is amended to incorporate the subject matter of claim 5. Claim 1 now requires, *inter alia*, that “the memory device further stores therein data related to an exchange, by a recycling operation, of a part of the used ink cartridge.”

Even if the Examiner’s position in which a remanufacture date, in place of a manufacture date, would be stored in an ink cartridge memory when an ink cartridge is remanufactured is reasonable in view of the applied references, such a remanufacture date can be used to manage only ink that is refilled when the ink cartridge is remanufactured. That is, the remanufacture date can be used to manage the refilled ink and determine a useable period of the refilled ink, but the remanufacture date cannot be used to manage component parts of the ink cartridge and to determine reliability (durability) of the component parts because the periodical change (time-related change) of the component parts, such as deformation or dimensional change of the component parts, change of gas permeability of component parts, etc., lasts from an initial manufacture of the ink cartridge.

For this reason, according to the present invention, when an ink cartridge is recycled, not only is data stored in an ink cartridge memory device indicative of when the used ink cartridge was recycled, but additional data is also stored in an ink cartridge memory device related to an

exchange of a part of the used ink cartridge by a recycling operation, so that those data can be effectively used when the recycled ink cartridge is further recycled.

In regard to Murray, the Examiner believes that the claimed “part” can be ink, such that an exchange of ink or refilling of ink would disclose the claimed “exchange of a part” as originally recited in claim 5, and now recited in claim 1. However, the Examiner’s reference to Murray at column 3, lines 30-35 fails to relate to *recycling* operations. Accordingly, the ink data stored in the memory device 48 fails to suggest the features recited in present claim 1.

Furthermore, Applicants clarify that the phrase “exchange of a part” of the used ink cartridge would not include the refilling of ink because ink in the cartridge is physically consumed or expended and is therefore not a nonexpendable component part to be exchanged for another like component part. Common sense dictates that replenishment of expended ink is in no manner an “exchange” as the term is used in the English language. Thus, it is clear that, to a skilled artisan, the phrase “exchange of a part of the used ink cartridge by a recycling operation” would not apply to ink refills.

Applicants also draw the Examiner's attention to the specification at [0046], which describes certain exemplary data to be stored on the memory device of the present invention, such as, for examples, “maintenance condition such as exchange of parts, the latest usage time of the ink cartridge, the time of the ink end, the usage condition or environment of the ink cartridge.” Thus, the specification also supports the interpretation of the phrase to exclude ink by virtue of the context of the phrase “exchange of parts” in a listing separately describing ink related data points.

Neither Murray nor Hirst teaches or suggests an ink cartridge where “the memory device further stores therein data related to an exchange of a part of the used ink cartridge by a recycling operation.” Even taken for what they would have meant as a whole to an artisan of ordinary skill, the combined teachings of these two references lack the above-identified requirement of the rejected claims. Thus, the Examiner is respectfully requested to withdraw this rejection.

B. Claims 2-5 and 9

Claim 5 is canceled.

Claims 2-4 and 9 are patentable at least by virtue of their dependency on claim 1.

III. Rejection under 35 U.S.C. § 103(a) in view of U.S. Patent No. 6,126,356 to Childers et al. (“Childers”) and Hirst

The Examiner has rejected claims 1, 2, 6 and 7 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Childers in view of Hirst.

A. Claim 1

Claim 1 is not rendered obvious over Childers in view of Hirst. As previously discussed, claim 1 is amended to incorporate the subject matter of claim 5.

As claim 5 is not rejected under this combination of references, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) over Childers in view of Hirst.

B. Claims 2, 6 and 7

Claims 2, 6 and 7 are patentable at least by virtue of their dependency on claim 1 and such is earnestly requested.

IV. Rejection under 35 U.S.C. § 103(a) in view of U.S. Patent No. 5,506,611 to Ujita et al. (“Ujita”) and Hirst

The Examiner has rejected claims 1, 2 and 8 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ujita in view of Hirst.

A. Claim 1

Claim 1 is not rendered obvious over Ujita in view of Hirst. As previously discussed, claim 1 is amended to incorporate the subject matter of claim 5.

As claim 5 is not rejected under this combination of references, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) over Ujita in view of Hirst.

B. Claims 2 and 8

Claims 2 and 8 are patentable, at least by virtue of their dependency on claim 1, and such is earnestly requested.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116
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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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